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Transfer of Information from Personal Health Records: A Survey of Veterans Using My HealtheVet

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Introduction

In the contemporary healthcare environment, a patient may be seen by multiple care givers and healthcare systems. This is more common for rural Veterans who maintain local non-VA primary care providers but seek specialty care at a VA medical center located in an urban setting. This can make continuity of care a potential problem. One response to this issue is the creation of electronic personal health records (PHR) that allow patients ownership of their personal health information. Along with storing information for personal use, a PHR can be an effective tool for the transfer of information, enhancing communication between the patient and one or more caregivers and allowing health information to be shared without the need for timeconsuming and cumbersome release of information processes. As well, PHRs have the potential to reduce redundant care, medication errors, healthcare utilization, and cost.1-5

In order to exploit PHRs' potential, it is necessary to understand if and how this transfer of information is performed. In 2003, the Veterans Health Administration (VHA) of the U.S. Department of Veterans Affairs (VA) introduced My HealtheVet, a Web-based information site that also contains a portal providing a PHR function. This PHR is connected to Veterans' individual VA medical records, and can be used to refill prescriptions and enter information in food or activity journals.

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Key Findings

A survey of Veterans' use of My HealtheVet found that:

- In the first wave of data collected from 25,898 respondents, 41% reported printing information from the site, 21% reported saving information electronically, while only 4% sent information to another person.
- In the second wave of data collection, 30% of 18,471 respondents reported self-entering medication information, with 18% sharing it with their Veterans Affairs provider and 9.6% sharing it with a non-VA provider.

Approximately 20% of the Veterans receiving care from the VA at the time of this study were registered with My HealtheVet, with 30% of these being "In-Person Authenticated." This means that his or her identity has been confirmed face-toface at a VA facility, allowing the individual to see the names of his or her prescriptions, as opposed to non-authenticated users who are allowed access to only prescription codes.

Veterans receive co-managed care to a greater extent in rural areas⁶, and this diversity of care providers has been associated with negative outcomes.⁷ A factor in these outcomes may have

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to do with non-VA providers' lack of access to VA medical records, thus having to rely on record transfer or patient reports for information regarding a Veteran's VA care. My HealtheVet can improve care coordination. This study explores the extent of Veterans' interest in and current use of My HealtheVet as a means of sharing and transferring health information.

Methods

The American Consumer Satisfaction Index (ACSI)—a Web-based survey tool for assessing consumer satisfaction and preferences—was made available as a pop-up on the My HealtheVet portal. Using a sampling percentage of 4%, a random nationwide sample of veterans using My HealtheVet who had viewed at least four pages within the site was invited to participate in the survey.

Data were collected in two surveys conducted in 2010: the first wave collected between February 26 and July 7, the second between July 7 and October 4. **Wave One** asked respondents if they had ever printed, saved, or transferred information from My HealtheVet (here, "information" includes non-medical information available on the site). They were then asked if, hypothetically, they would save information from their PHR at a site outside My HealtheVet if they could, and where they would store it. **Wave Two** addressed the issue of sharing medical information from My HealtheVet with both VA and non-VA healthcare providers. Questions asked if the respondent had used the self-entry function for tracking medications, what medications were recorded, and if they shared their complete medication list with VA and/or non-VA providers.

Findings

Wave One: Of the 25,898 respondents, the largest group (45.6%) was between 60 and 69 years of age. Most of the respondents rated their health as "Good" or "Very Good" and 70% had gone through the inperson authentication process. Forty percent reported that they had printed out information from My HealtheVet, while 21% reported that they had saved information from My HealtheVet electronically to their computer, with only 4% reporting that they had sent information from My HealtheVet to another person, as shown in Table 1. When asked if they would save information from their PHR to a site outside My HealtheVet if they could. 36% responded "No," 30% were "Not sure," 28% responded "Yes," and 6% responded that this would not be useful. Of those responding "Yes" or "Not sure," Table 2 describes where they would save their information.

Table 1. Type of Information Respondents Printed, Saved, or Sent to Another Person in My HealtheVet: Wave One					
	N (%)				
TYPE OF INFORMATION	I HAVE PRINTED THE FOLLOWING FROM MY HEALTHEVET (CHECK ALL THAT APPLY) (N = 10,488)	I HAVE SAVED THE FOLLOWING FROM MY HEALTHEVET TO MY COMPUTER $(N = 5,555)$	I HAVE SENT THE FOLLOWING INFORMATION FROM MY HEALTHEVET TO ANOTHER PERSON (N = 1,013)		
Medication list	8,487 (81)	4,187 (75)	295 (29)		
Information about VA benefits	2,557 (24)	1,390 (25)	494 (49)		
Information about health (such as an article or information from the medical library)	2,153 (21)	1,232 (22)	366 (36)		
Information about myself that I collected at home (such as blood sugar, blood pressure, or weight)	1,457 (14)	1,001 (18)	145 (14)		
Preventive health reminders	820 (8)	533 (10)	72 (7)		
Other, please specify	684 (7) ^a	506 (9) ^b	83 (8)°		
Health calendar	582 (6)	370 (7)	48 (5)		
Information entered in food or activity journals	357 (3)	282 (5)	37 (4)		

^aCommon responses: In-person authentication, emergency contact and info card, physician contact information card, and prescription review.

^bCommon responses: Download of Veterans Affairs (VA) form, one's password, emergency contacts, worksheets, the Web site address, insurance coverage, and immunization data.

°Common responses: Send information on how to use the site or diabetes information to others.

Wave Two: The Wave Two sample included 18,471 participants, their demographic characteristics comparable to those in Wave One. Thirty percent indicated that they used the self-entry function to track medication and supplements data, while 52% did not use this function and 19% were not sure, as shown in Table 3. Of those using the self-entry function for tracking medications, 60% shared their complete medication list with their VA providers, whereas 32% shared their complete medication list with their non-VA providers. Here, "complete medication list" included over-the-counter medications, herbals and other supplements, VA prescriptions other than from a home VA facility, prescriptions from non-VA health providers, or prescriptions not filled by VA pharmacies.

Conclusions

This study reveals that 18% of the total sample were sharing their complete medication list with VA providers and 9.6% were sharing it with non-VA providers, indicating that Veterans are using My HealtheVet to improve coordination of their health care. However, this proportion is small. These modest rates of actual sharing with providers, combined with a considerable share of the sample responding that they do not know if they are transferring information, indicates that healthcare literacy and computer training may be key to expanding PHR use.⁸

Table 2. Respondents' Endorsement of Where They Would Save Their Health Information Outside of My HealtheVet If They Could: Wave One (N = 15,035)				
	N (%)			
Save the information to another place (for example, by copying to a file on my computer)	9,308 (62)			
Share the information with a family member or friend	5,627 (37)			
Give the electronic information to my non-VA provider	5,499 (37)			
Use the information with another program (for example, to check for drug interactions)	3,547 (24)			
Put the information into another personal health record	3,244 (22)			
Put the information in another Web site (for example, to receive customized care recommendations or to use other kinds of tools)	956 (6)			
Other, please specify (common responses: "Back up," "print paper copy to store," "flash drive," and "iPhone")	586 (4)			

My HealtheVet could enhance decision-making by Veterans regarding medication choice or referral practice by Veterans and non-VA providers. As well, that the majority of the respondents were over 60 years of age and that a considerable proportion (40% in both waves) rated themselves as having fair or poor health indicates that though these factors may be seen as barriers for the use of PHRs, the benefits of PHRs motivate many Veterans to overcome these potential impediments.

This study confirms that more upfront training, especially for those with low computer literacy, may be needed before patients realize the full potential of PHRs, and that more research is needed to isolate and understand these barriers in order to find ways to reduce them.

(N = 18,471)					
	N (%)				
	DO YOU USE MY HEALTHEVET PHARMACY SELF-ENTERED MEDICATIONS + SUPPLEMENTS? ^a	IF YES (N = 5,490): IN THE LAST 12 MONTHS, DID YOU SHARE YOUR MY HEALTHEVET, "MY COMPLETE MEDICATIONS LIST" WITH ANY OF YOUR			
		VA HEALTHCARE PROVIDERS?	NON-VA HEALTHCARE PROVIDERS?		
Yes	5,490 (30)	3,295 (60)	1,780 (32)		
No	9,552 (52)	1,628 (30)	3,435 (63)		
Not sure	3,429 (18)	567 (10)	275 (5)		

Table 3. Transfer of Medication Information to Veterans Affairs and Non–Veterans Affairs Providers: Wave Two (N - 18.471)

^aPercentages provided for responses to this question indicate percentage of respondents, not the percentage of veterans who take over-the-counter medications or medications prescribed by non-VA providers.

References

- Ross S, Moore L, Earnest M, Wittevrongel L, Lin C. Providing a web-based online medical record with electronic communication capabilities to patients with congestive heart failure: Randomized trial. J Med Internet Res 2004;6:e12.
- Schnipper J, Hamann C, Ndumele C, Liang C, Carty M, Karson A, et al. Effect of an electronic medication reconciliation application and process redesign on potential adverse drug events: A cluster-randomized trial. Arch Intern Med 2009;169:771–780.
- 3. Kaelber D, Shah S, Vincent A, Pan E, Hook J, Johnston D, et al. The value of personal health records. Boston: Center for Information Technology Leadership, 2008.
- Ralston J, Carrell D, Reid R, Anderson M, Moran M, Hereford J. Patient web services integrated with a shared medical record: Patient use and satisfaction. J Am Med Inform Assoc 2007;14:798–806.
- Zhou Y, Kanter M, Wang J, Garrido T. Improve quality at Kaiser Permanente through e-mail between physicians and patients. Health Aff 2010;29:1370–1375.
- Carey K, Montez-Rath ME, Rosen AK, Christiansen CL, Loveland S, Ettner SL. Use of VA and Medicare services by dually eligible veterans with psychiatric problems. Health Serv Res 2008;43:1164–1183.
- Wolinsky FD, Miller TR, An H, Brezinski PR, Vaughn TE, Rosenthal GE. Dual use of Medicare and the Veterans Health Administration: Are there adverse health outcomes? BMC Health Serv Res 2006;6:131.
- Sarkar U, Karter AJ, Liu JY, Adler NE, Nguyen R, Lopez A, et al. The literacy divide: Health literacy and the use of an internet-based patient portal in an integrated health system—results from the Diabetes Study of northern California (DISTANCE). J Health Commun 2010;15(Suppl 2):183–196.

Impact

Only a small minority of Veterans are taking advantage of the potential for personal health records (PRCs) to improve continuity of care. In order to increase the number of Veterans transferring their personal health records via My Health*e*Vet

- further education and awareness are needed, particularly for those with low computer literacy
- more research should be performed regarding the barriers to further adoption, as well as on the real impact of PRCs on patient outcomes and well-being.



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